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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,203	09/24/2007	Gerhard Kressner	02894-754US1 06796	1415
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EXAMINER KIM, JOHN K				
ART UNIT 2834		PAPER NUMBER		
NOTIFICATION DATE 04/15/2009		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

### Office Action Summary

**Application No.**

10/577,203

**Applicant(s)**

KRESSNER ET AL.

**Examiner**

JOHN K. KIM

**Art Unit**

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 February 2009.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.  
4a) Of the above claim(s) 15-18 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-14 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 27 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 4/27/2006  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Inventor's Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Election was made without traverse in the reply filed on 2/23/2009. Claims 15-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected claims, there being no allowable generic or linking claim.

***Claim Objections***

2. Claim 13 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 13 refers a small electric appliance which is broadening the scope of claim 1 where it depends to. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2, 3, 5 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 refers a selectable position. However it is not clear or definite which position is selectable by the torsion element. The examiner interprets the torsion element can be fixed at a variable location by tuning or adjustment.

Claim 3 refers the tuning element is arranged on the stator such that it can be displaced and fixed in position. In the disclosure, stator is referenced by numeric 13 as best shown by Fig. 4 and Para. [0026]. In order to be arranged on the stator, it has to be in outside of the stator. Note that stator includes housing. However it would not be the invention. Thus, it is indefinite that the tuning element is arranged on the stator. The examiner interprets the tuning element is arranged in the stator as best understood from Fig. 2.

Claim 5 refers the tuning element engages into at least one groove in the stator. However, the tuning element (6) can not engages into at least one groove (19) in the stator as the tuning element is away from the stator if the stator is that in Para. [0026]. (see Fig. 2) Note that Para. [0026] The housing 2, the coil form 8, the carrier plate 11 and the permanent magnets 12 can be assigned to the stator 13.

Claim 8 refers the torsion element is fixed on the rotor. However, throughout the disclosure, torsion element is not clearly defined. Ambiguously, torsion spring and torsion rod 10 are implied. However, spring is not shown in the invention and torsion rod is not fixed on the rotor. Note that the rotor shaft is a hollow shaft and the torsion rod is floated from the rotor shaft. The examiner interprets the torsion element is at least partially arranged within the shaft.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Craft et al (US 5613259, IDS) in view of Moret et al (US 4146020) and in further view of Brosens (US 4135119).

As for claim 1, Craft shows (in Figs. 1-14) and discloses an electric drive unit for generating an oscillating movement, the drive unit comprising: a stator (70); a rotor (72); a torsion element (44 or 100); wherein the rotor comprises a shaft (40), and wherein the torsion element (100) is at least partially arranged within the shaft (see Figs. 4-5).

Craft however is silent to show or disclose (1) a tuning element, which acts upon the torsion element and serves for mechanically tuning the resonant frequency of the drive unit, and (2) a hollow shaft.

Re (1), Moret shows (in Fig. 1-2) and discloses a tuning element (60-62), which acts upon the torsion element (54) and serves for mechanically tuning the resonant

frequency of the drive unit (col. 7, line 42-63). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Moret with that of Craft to obtain a sufficient degree of efficiency of the motor and a sufficient piston stroke and thereby a sufficient oscillatory movement of the toothbrush. (col. 7, line 39-41)

Re (2), Brosens shows (in Fig. 3) a rotor (22) comprises a hollow shaft (12). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Brosens with that of Craft to coaxially dispose a torsion bar within the tubular rotor shaft (col. 2, line 52-55).

As for claim 2, Craft in view of Moret and in further view of Brosens shows and discloses the claimed invention as applied to claim 1 above. Moret shows (in Figs. 1-2) and discloses the tuning element (60-62) is arranged to secure the torsion element (54) in a selectable position. (see selectable grooves 61)

As for claim 3, Craft in view of Moret and in further view of Brosens shows and discloses the claimed invention as applied to claim 2 above. Craft in view of Moret shows (in Fig. 9) and discloses the tuning element (60-62, Moret) is arranged in the stator (70) such that it can be displaced and fixed in position.

As for claim 4, Craft in view of Moret and in further view of Brosens shows and discloses the claimed invention as applied to claim 3 above. Craft in view of Moret shows (in Fig. 9) and discloses the tuning element (60-62, Moret) is displaceable parallel to the longitudinal axis (40) of the drive unit, as grooves 61 of the element can

be rearranged since it has been held that rearranging parts of an invention involved only routine skill in the art. *In re Japikse*, 86 USPQ 70 (CCPA 1950).

As for claim 5, Craft in view of Moret and in further view of Brosens shows and discloses the claimed invention as applied to claim 3 above. Moret shows (in Fig. 1) and discloses the tuning element (60-62) engages into at least one groove (57, 59a) in the stator (casing 6). (col. 6, line 9-20)

As for claim 6, Craft in view of Moret and in further view of Brosens shows and discloses the claimed invention as applied to claim 1 above. Moret failed to show or disclose the tuning element comprises a clamping device. However, it is notoriously old and well known in the art to use clamping device such as screw or nut for fastening, and therefore the examiner hereby takes official notice regarding the claiming device. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made for easy assembly.

As for claim 7, Craft in view of Moret and in further view of Brosens shows and discloses the claimed invention as applied to claim 6 above. Moret shows (in Fig. 1) and discloses the tuning element (60-62) comprises two parts (61, 62) and at least one connecting element (60) configured to draw the two parts together.

As for claim 8, Craft in view of Moret and in further view of Brosens shows and discloses the claimed invention as applied to claim 1 above. Craft shows (in Figs. 4A and 8A) and discloses the torsion element (100) is fixed on the rotor, as at least partially arranged within the shaft (40).

As for claim 9, Craft in view of Moret and in further view of Brosens shows and discloses the claimed invention as applied to claim 1 above. Craft shows (in Figs. 4A and 8A) and discloses the torsion element (100) comprises a torsion rod.

As for claim 10, Craft in view of Moret and in further view of Brosens shows and discloses the claimed invention as applied to claim 1 above. Moret shows (in Figs. 1-2) and discloses a housing (6) having a recess (57, 59a) arranged to accommodate the tuning element (60-62).

As for claim 11, Craft in view of Moret and in further view of Brosens shows and discloses the claimed invention as applied to claim 1 above. Craft in view of Brosens shows (in Figs. 8B) and discloses the stator (70) comprises permanent magnets (68, 70 as combined with Brosens) and at least one coil (82, 84).

As for claim 12, Craft in view of Moret and in further view of Brosens shows and discloses the claimed invention as applied to claim 1 above. Craft in view of Brosens shows (in Figs. 6) and discloses the rotor (72) comprises an armature of a magnetizable material (92).

As for claim 13, Craft in view of Moret and in further view of Brosens shows and discloses the claimed invention as applied to claim 1 above. Craft shows (in Figs. 6) and discloses a small electric appliance (toothbrush).

As for claim 14, Craft in view of Moret and in further view of Brosens shows and discloses the claimed invention as applied to claim 13 above. Craft shows (in Figs. 6)



and discloses a small electric appliance in the form of an electric toothbrush (toothbrush).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN K. KIM whose telephone number is (571)270-5072. The fax phone number for the examiner where this application or proceeding is assigned is 571-270-6072. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quyen Leung can be reached on 571-272-8188. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JK

/BURTON MULLINS/  
Primary Examiner, Art Unit 2834